Name:

at1110paper_practice_test (v118)

1. Solve the equation.

$$11x^2 - 29x - 17 \;=\; 4x^2 + 3x - 2$$

$$7x^2 - 32x - 15 = 0$$
$$(7x + 3)(x - 5) = 0$$
$$x = \frac{-3}{7} \qquad x = 5$$

2. Expand the following expression into standard form.

$$(9x - 5)(4x - 7)$$

$$36x^2 - 63x - 20x + 35$$
$$36x^2 - 83x + 35$$

3. Expand the following expression into standard form.

$$(5x - 4)^2$$

$$25x^2 - 20x - 20x + 16$$
$$25x^2 - 40x + 16$$

4. Factor the expression.

$$x^2 + 6x + 8$$

$$(x + 4)(x + 2)$$

5. Expand the following expression into standard form.

$$(9x + 2)(9x - 2)$$

$81x^2 - 18x + 18x - 4$

$81x^2 - 4$

6. Factor the expression.

$$36x^2 - 49$$

$(6x + 7)(6x - 7)$

7. Solve the equation with factoring by grouping.

$$12x^2 - 15x + 8x - 10 = 0$$

$(3x + 2)(4x - 5) = 0$

$x = \frac{-2}{3}$ $x = \frac{5}{4}$

8. Solve the equation.

$$(9x + 8)(7x - 6) = 0$$

$x = \frac{-8}{9}$ $x = \frac{6}{7}$